In the United States Court of Federal Claims

No. 05-420V

(Filed Under Seal: February 12, 2009) (Reissued: March 3, 2009)¹

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KELLY BOLEY,	*
,	*
Petitioner,	* National Vaccine Injury
,	* Compensation Program; Review of
V.	* Special Master's Decision on
	* Remand; Hepatitis B Vaccine; Failure
SECRETARY OF HEALTH AND	* to Show that Vaccine Injuries
HUMAN SERVICES,	* Persisted for at Least Six Months.
,	*
Respondent.	*
•	*
***********	*

Ronald C. Homer, Conway, Homer & Chin-Caplan, P.C., Boston, Massachusetts, for Petitioner.

Katherine C. Esposito, with whom were Gregory G. Katsas, Assistant Attorney General, Timothy P. Garren, Director, Vincent J. Matanoski, Acting Deputy Director, and Gabrielle M. Fielding, Assistant Director, Torts Branch, Civil Division, United States Department of Justice, Washington, D.C., for Respondent.

OPINION AND ORDER

WHEELER, Judge.

This case is before the Court a second time for review of the Special Master's decision dismissing Kelly Boley's petition for compensation under the National Vaccine Injury

¹ Pursuant to Rule 18(b) of the Court's Vaccine Rules, this opinion and order was initially filed under seal. As required under the Rules, each party was afforded 14 days from the date of issue, until February 26, 2009, to object to the public disclosure of any information furnished by that party. Neither party submitted any proposed redactions.

Compensation Program, 42 U.S.C. § 300aa-10 et seq. Ms. Boley claims that a hepatitis B vaccine caused her to suffer neurological injuries and emotional distress. In her initial decision, the Special Master found that Ms. Boley's injuries did not persist for six months, as required by 42 U.S.C. § 300aa-11(c)(1)(D)(i). Boley v. Sec'y of HHS, No. 05-420V, 2007 WL 4589766 at *24 (Fed. Cl. Spec. Mstr. Dec. 17, 2007) vacated 82 Fed. Cl. 407 (2008). Petitioner filed a timely motion for review of this decision, asserting that the Special Master's findings were arbitrary, capricious, and an abuse of discretion.

On review, the Court vacated the Special Master's decision, finding a lack of fundamental fairness in the procedures that were followed. <u>Boley</u>, 82 Fed. Cl. at 407. Specifically, the Court found violations of Vaccine Rules 3(b) and 8(c). <u>Id.</u> at 408. Rule 3(b) requires the Special Master, in establishing appropriate proceedings, to afford each party "a full and fair opportunity to present its case" Rule 8(c) requires the Special Master, in considering all relevant and reliable evidence, to be "governed by principles of fundamental fairness to both parties." The Court determined that the Special Master's open hostility toward Petitioner and her counsel, her monopoly of the questioning of witnesses during the hearing, and her failure to allow the filing of any post-hearing briefs after stating that they would be allowed, all were in violation of the cited Vaccine Rules. <u>Boley</u>, 82 Fed. Cl. at 407-08, 413-14.

The Court remanded the case to the Special Master with instructions to conduct further proceedings which, at a minimum, would include: (1) allowing Petitioner to present evidence in a hearing without undue interruption; and (2) affording the parties the chance to submit post-hearing briefs, as initially agreed. <u>Id.</u> at 408. The Court observed that the reopened hearing could include testimony from anyone with relevant knowledge or information, not just the two experts who testified at the first hearing. <u>Id.</u> at 414. Following the opportunity for these additional proceedings, the Court directed the Special Master to "prepare a decision that reasonably analyzes all of the relevant evidence of record, not just a single excerpt of testimony." <u>Id.</u> at 408. As required by the National Vaccine Injury Compensation Program, the remand proceedings were to be completed within 90 days from the date of the Court's decision. 42 U.S.C. § 300aa-12(e)(2); Vaccine Rule 28.

In the remand proceedings, Petitioner's counsel elected not to present additional testimony. Spec. Mstr. Conf. Tr. 3, 6 (June 25, 2008). The parties did file post-hearing briefs, and on September 9, 2008, the Special Master issued a 60-page slip opinion dismissing the petition again. Boley v. Sec'y of HHS, No. 05-420V, 2008 WL 4615034 (Fed. Cl. Spec. Mstr. Sept. 9, 2008). The only question, as in the original Special Master's decision, is whether Ms. Boley's injuries from the hepatitis B vaccine lasted for more than six months. Petitioner again filed a timely motion for review of the Special Master's new decision, arguing that the Special Master's findings are arbitrary, capricious, and an abuse

of discretion. Respondent filed a response to Petitioner's motion, asking that the Special Master's dismissal of the petition be affirmed. The Court heard oral argument on January 15, 2009.

The Court has jurisdiction of this matter pursuant to the National Vaccine Injury Compensation Program, 42 U.S.C. § 300aa-12(e). For the reasons explained below, the Court finds that Petitioner did not satisfy her burden of showing that her injuries from the hepatitis B vaccine lasted for more than six months. The Court's ruling is based upon a careful review of the extensive medical records, the hearing testimony of the expert witnesses, and the briefs and oral argument of counsel. Accordingly, the Special Master's decision on remand is affirmed.

Factual Background

The history of Ms. Boley's hepatitis B vaccination and injuries is recited in the Court's earlier decision in this matter. <u>Boley</u>, 82 Fed. Cl. at 408-10. She began the hepatitis B series of vaccinations so she could attend dental hygiene school. Pet. Ex. 12 at 20; Pet. Ex. 15 at ¶ 1. Ms. Boley received her second hepatitis B vaccine on June 12, 2002 when she was 29 years old. Pet. Ex. 5 at 88. The record is replete with medical records documenting Ms. Boley's many doctor and hospital visits. In reviewing the Special Master's remand decision, it is useful to analyze Ms. Boley's medical records in three segments: (A) the period prior to the June 12, 2002 hepatitis B vaccination; (B) the period beginning June 12, 2002 and thereafter. All of the records below are identified and discussed in the Special Master's remand decision.

A. The Period Prior to June 12, 2002

Prior to 2002, Ms. Boley had not experienced any serious health problems or limitations. She rarely visited doctors' offices except for annual obstetric and gynecological check-ups. Pet. Ex. 14 at 18. However, beginning in May 2000, Ms. Boley's medical records reveal a few episodes of dizziness, fatigue, and nausea. She reported dizziness on May 9, 2000 while she was pregnant. Pet. Ex. 2 at 7. She had symptoms of dizziness and lethargy on December 12, 2000, and dizzy spells and nausea on December 13, 2000. Pet. Ex. 3 at 190-91, 194-95. The University of Colorado Hospital diagnosed Ms. Boley with panic attacks and prescribed Tylenol for headaches on December 20, 2000 while she again was pregnant. Id. at 96-97. Closer in time to the hepatitis B vaccination, Ms. Boley reported "dizziness and lethargy for 7 weeks" on March 13, 2002, and a 5-6 pound weight loss "over the past few months." Pet. Ex. 5 at 91. Ms. Boley was not pregnant in 2002 when she experienced dizziness and lethargy. Ms. Boley received her first hepatitis B vaccination without adverse effect on May 13, 2002. Id. at 87.

B. The Six-Month Period Beginning June 12, 2002

Ms. Boley received her second hepatitis B vaccination on June 12, 2002. Pet. Ex. 5 at 88. One week later, on June 19, 2002, Ms. Boley visited her primary care physician, Dr. Philip Rosenblum, complaining of "extreme fatigue/malaise" for the past two or three days, and reporting that the symptoms were "worsening a little bit each day." <u>Id.</u> at 86. Ms. Boley reported that the symptoms began "shortly [after the] injection [was] given." <u>Id.</u> When these symptoms persisted, Dr. Rosenblum advised Ms. Boley to visit the local hospital. <u>Id.</u> at 65.

Ms. Boley went to the North Suburban Medical Center in Thornton, Colorado on June 21, 2002. Pet. Ex. 9 at 1. The report from this visit indicates that Ms. Boley was experiencing lethargy, headaches, dizziness, and neck stiffness since the "hep. B shot" on June 12, 2002. Id. at 4. The report states that Ms. Boley was "[d]ischarged in good condition," and that the clinical impression was "[p]ossible adverse reaction to hepatitis B vaccine, possible viral illness." Id. at 10.

Ms. Boley states in a March 10, 2005 affidavit that a four-day period shortly after the hepatitis B vaccination was particularly difficult:

The days following, I became worse. I spent most of my time on the couch or in bed. There were about four days, in the middle of the two weeks, where I could barely get out of bed. The fatigue and the dizziness were so intense that I would wake up in the morning, eat breakfast, go back to bed and stay in bed sleeping all day, only getting up to eat or use the restroom. I had mononucleosis when I was a child and I remember being sick, but I have never in my life been so sick as I was after the vaccine. I had to have my mom come over four days to watch my three kids, and I had my husband come home from work one day to help me.

Pet. Ex. 15 at ¶ 5.

Following the June 21, 2002 Medical Center visit, the medical records do not indicate any further doctor or hospital visits for the next five weeks, until July 29, 2002. At that time, Ms. Boley saw Dr. Rosenblum again complaining of dizzy spells and extreme fatigue. Pet. Ex. 5 at 85. The record from this visit noted that "[a]ll this has come on since the second hep B shot," but Dr. Rosenblum also observed that Ms. Boley was "stressed" due to "starting dental hygiene school." <u>Id.</u> She was experiencing nasal congestion, for which Dr. Rosenblum prescribed a nasal spray. <u>Id.</u>

Ms. Boley next visited Dr. Rosenblum on August 12, 2002, still complaining of dizzy spells. <u>Id.</u> at 84. Dr. Rosenblum prescribed medication for dizziness and vertigo. <u>Id.</u> The record notes Dr. Rosenblum's question of whether Ms. Boley's anxiety was attributable to starting school within the next week. <u>Id.</u> Dr. Rosenblum referred Ms. Boley to an ear, nose and throat specialist, Dr. Dennis Barcz. <u>Id.</u> at 61.

Dr. Barcz evaluated Ms. Boley on August 16, 2002. <u>Id.</u> Dr. Barcz's report states in pertinent part:

[Ms. Boley] complains of about a two-month history of dizziness. She describes occasional spinning but more of a constant "groggy" lightheaded feeling. This is associated with general fatigue. There is some nausea but no vomiting. She denies any previous ear problems. There are no ear symptoms associated with this dizziness. Ms. Boley dates the symptoms to hepatitis B vaccine at the beginning of the symptoms.

. . .

Certainly we see labyrinthitis² associated with viral infections, and I am not sure if some reaction to the vaccine sent off an inflammatory labyrinthitis. There is no real treatment other than symptomatic treatment with medications like meclizine.

<u>Id.</u> Dr. Barcz found the tympanic membranes and external canals of Ms. Boley's ears to be normal, and he stated that "[n]euro-otologic testing is normal." <u>Id.</u> On August 19, 2002, Dr. Barcz had a brain MRI performed on Ms. Boley, the results of which were normal. Pet. Ex. 6 at 7.

Ms. Boley made no further medical visits for approximately six weeks, until October 8, 2002. At that time, Ms. Boley saw Dr. Rosenblum, stating that she had been told in dental hygiene school that her "thyroid feels big." Pet. Ex. 5 at 83. She still was experiencing dizziness and said that she nearly passed out in class. <u>Id.</u> Her left arm had been shaking. <u>Id.</u>

Ms. Boley visited a neurologist, Dr. Hua Judy Chen, on October 30, 2002. <u>Id.</u> at 59-60. Dr. Chen recounted Ms. Boley's post-vaccine experience of a "two-week illness including body fatigue, chills, dizzy, and pain behind eyes." <u>Id.</u> at 59. Following a physical

² "Labyrinthitis" is an inflammation of the internal ear, sometimes accompanied by vertigo and deafness. <u>Dorland's Illustrated Medical Dictionary</u>, 31st ed. (2007) at 1009.

examination of Ms. Boley, Dr. Chen found her normal, but with "[l]ikely transient neurological symptoms after viral or virus immunization [that] will resolve over time," and "possible right ulnar nerve mononeuropathy across the elbow." <u>Id.</u> at 60. Dr. Chen advised Ms. Boley "to avoid pressure on her elbows." <u>Id.</u>

During November 2-20, 2002, Ms. Boley made six medical visits and three telephone calls to doctors or hospitals as follows: (1) She visited the North Suburban Medical Center Emergency Department on November 2, 2002 complaining of spasms and hand, leg, and foot numbness (Pet. Ex. 9 at 34-35); (2) She had an ultrasound test performed on November 7, 2002 because of her concern that she had an enlarged thyroid (Id. at 41); (3) She visited the North Suburban Medical Center on November 10, 2002 complaining of pain below her breastbone (Id. at 45, 55-57, 59); (4) She visited Dr. Rosenblum on November 11, 2002 to follow up on her chest pain, and to report recent panic attacks (Pet. Ex. 5 at 81); (5-6) She called Dr. Rosenblum twice on November 12, 2002, feeling the effects of nausea and panic attacks from recent drug prescriptions (Id. at 78, 80); (7) She visited the North Suburban Medical Center Emergency Department on November 14, 2002 complaining of left-side chest pain and anxiety attacks (Pet. Ex. 9 at 69-70); (8) She visited Dr. Rosenblum's nurse practitioner on November 16, 2002 complaining of reactions to medicine, including difficulty swallowing, muscle spasms, and internal trembling (Pet. Ex. 5 at 79); and (9) She called Dr. Rosenblum's office on November 20, 2002 complaining of fatigue and dizziness from drugs prescribed by the nurse practitioner (Id. at 76). Petitioner does not contend that any of these visits or calls, or the symptoms of which she complained, are attributable to the hepatitis B vaccine. Petitioner did not mention any of these nine instances in the post-hearing brief to the Special Master, or in the petition for review to the Court.

Ms. Boley visited Dr. Chen again on November 26, 2002 to follow up with her symptoms of dizziness, shaking, and numbness. <u>Id.</u> at 58. Ms. Boley complained of intermittent dizzy spells and mild headaches. <u>Id.</u> Dr. Chen noted that Ms. Boley's "[e]xam was normal," and that she had "[u]nexplained neurological symptoms likely related to after viral or virus immunization." Id.

Ms. Boley had four additional medical events in early December 2002. She visited Dr. Rosenblum on December 4, 2002 with questions about her anxiety medications. She had experienced chest aches for three days, as well as fatigue and lightheadedness. <u>Id.</u> at 77. Dr. Rosenblum prescribed an anti-inflammatory drug for possible rib inflammation. <u>Id.</u> Ms. Boley again visited Dr. Rosenblum on December 6, 2002 for a follow-up diagnosis of her chest pain. <u>Id.</u> at 74. She also took a blood test on December 6, 2002. <u>Id.</u> at 6. Due to continuing shortness of breath problems, Ms. Boley took an echocardiogram on December 10, 2002. Id. at 51-52. Again, Petitioner does not contend that any of these four medical

events are attributable to the hepatitis B vaccine, as they are not mentioned in the post-hearing brief to the Special Master, or in the petition for review to the Court.

C. The Period Beginning December 12, 2002

December 12, 2002 marks a date six months after Ms. Boley's June 12, 2002 hepatitis B vaccination, and thus the Court would have to find evidence of continued injuries from the vaccine after this date to rule in Ms. Boley's favor.

Ms. Boley visited Dr. Chen on December 16, 2002 to follow up again with her symptoms of dizziness, shaking, and numbness. Pet. Ex. 5 at 57. Ms. Boley informed Dr. Chen that she had finished her semester and that the shaking episodes had disappeared. Id. Ms. Boley complained of "eye pain with intermittent seeing black spots, [and] blurring." Id. Dr. Chen noted that "[h]er exam was normal." Id. Under "Impressions and Recommendations," Dr. Chen stated that Ms. Boley had "[u]nexplained dizzy and shaking symptoms possibly related to anxiety." Id. Ms. Boley also visited an ophthalmologist, Dr. Matthew Sanderson, on December 16, 2002 for a visual field test "which was basically normal." Pet. Ex. 10 at 2.

Ms. Boley saw a second neurologist, Dr. Jill Breen, on January 6, 2003. Pet. Ex. 5 at 53-56. Ms. Boley's chief complaint to Dr. Breen was "chronic dizziness." <u>Id.</u> at 53. In her detailed report to Dr. Rosenblum, Dr. Breen included Ms. Boley's history, that she "received a hepatitis B shot on June 13, 2002 [sic]," and that "she improved over the next couple of weeks, but not completely." <u>Id.</u> Dr. Breen performed a full physical examination and neurological evaluation of Ms. Boley, finding her normal in all respects. <u>Id.</u> at 53-56. As an assessment and plan, Dr. Breen concluded that Ms. Boley's symptoms "would be most consistent with a chronic fatigue syndrome." <u>Id.</u> at 56. Dr. Breen recommended no further neurological examinations, and suggested medication to help treat chronic fatigue syndrome. <u>Id.</u> Dr. Breen did not schedule any follow-up visits. <u>Id.</u>

Ms. Boley made two visits to her cardiologist, Dr. Peter Steele, on January 24, 2003 and February 7, 2003 respectively. <u>Id.</u> at 50; Pet. Ex. 8 at 2. Similarly, two visits to Dr. Rosenblum, one on January 30, 2003 and the other on February 21, 2003, were for a heart-related issue, mitral valve prolapse. Pet. Ex. 5 at 71-72. Petitioner does not claim that these visits are related to the hepatitis B vaccine.

Ms. Boley visited Dr. Michael Volz, a specialist in allergy, asthma, and immunological disorders, on March 15, 2003. Pet. Ex. 12 at 19-21. She informed Dr. Volz of her dizziness and fatigue. <u>Id.</u> at 19. Dr. Volz noted that "[t]he basis of the symptoms remain[s] uncertain," and that "[t]o date, there reportedly have been no objective findings but

interestingly the onset of this problem was within 24 hours after receiving the HBV vaccination – the second dose in a series of 3." <u>Id.</u> Dr. Volz conducted a thorough physical examination of Ms. Boley and found her normal. <u>Id.</u> at 20-21. In a "Discussion" section at the end of his report, Dr. Volz observed that "[t]he onset of episodic symptoms within 24 hours after the HBV vaccinations could be coincidental but would make one suspicious of some cause/effect possibly stimulating an enhanced hypersensitive immunologic reaction that may wax and wane and is stimulated by other factors nonspecifically since then." <u>Id.</u> at 21.

Ms. Boley visited Dr. Breen again on May 28, 2003, complaining of chronic dizziness. Pet. Ex. 11 at 5. Ms. Boley reported that her periods of dizziness and lightheadedness lasted for one to two weeks. <u>Id.</u> She stated that the dizziness is worse upon awakening, and that she usually feels better by lunch time. <u>Id.</u> Typically, she did not experience dizziness at night. <u>Id.</u> Occasionally, she had pain behind her eyes. <u>Id.</u> She also noted a sensitivity to light that could last one or two days. <u>Id.</u> She did not experience nausea or vomiting, headaches, blurred vision, or double vision. <u>Id.</u> After extensive neurological examination, Dr. Breen found Ms. Boley to be normal. <u>Id.</u> at 6. However, Dr. Breen prescribed further testing. Id. at 6-7.

On June 2, 2003, Karen Schroer, a Clinical Audiologist, administered an ENG³ test for balance. Pet. Ex. 14 at 115. She found that Ms. Boley had a 25 percent left ear unilateral weakness with no significant directional preponderance. <u>Id.</u> Ms. Schroer concluded that "[r]esults of this ENG exam are abnormal, suggesting a peripheral pathology." <u>Id.</u> Ms. Schroer is not a medical doctor. On June 4, 2003, Ms. Boley took an EEG⁴ test, the results of which were normal. Ex. 7 at 3. On July 7, 2003, Ms. Boley visited Dr. Sanderson's office again, complaining of "sharp shooting pain" in one eye, and a headache. Pet. Ex. 10 at 1. The record of this visit states that the eye pain is of "unknown nature." Id.

On July 25, 2003, Ms. Boley visited Dr. Rosenblum again. Pet. Ex. 5 at 69. The doctor's record states that Ms. Boley was there to obtain her "paperwork" for school. <u>Id.</u> A notation on the record stating "still ha[s] problems from Hep B vaccine," refers to Ms. Boley's statement to Dr. Rosenblum, not to a medical finding or conclusion of Dr.

³ An ENG, or electronystagmography, test is the "recording of changes in the corneoretinal potential due to eye movements, providing objective documentation of induced and spontaneous nystagmus." <u>Dorland's Illustrated Medical Dictionary</u>, 31st ed. (2007) at 609.

⁴ An EEG, or electroencephalogram, is "a recording of the potentials of the skull generated by currents emanating spontaneously from nerve cells to the brain. The normal dominant frequency of these potentials is about 8 to 10 cycles per second and the amplitude about 10 to 100 microvolts. Fluctuations in potential are seen in the form of waves, which correlate well with neurologic conditions and so are used in diagnostic criteria." <u>Dorland's Illustrated Medical Dictionary</u>, 31st ed. (2007) at 607.

Rosenblum. <u>Id.</u> Following this July 25, 2003 visit, Ms. Boley made a number of other medical visits during August and September 2003, but she does not contend that any of these visits are related to the hepatitis B vaccine. These visits generally involved a series of neurological and visual tests, all of which concluded that Ms. Boley was normal. <u>See</u> Pet. Ex. 5 at 1; Pet. Ex. 7 at 1-2; Pet. Ex. 11 at 8-9; Pet. Ex. 13 at 5-7.

Ms. Boley began treatments from Dr. Andrew Campbell on August 1, 2003.⁵ Dr. Campbell is an immunologist located in Spring, Texas. Dr. Campbell runs a facility called the Medical Center for Immune and Toxic Disorders, and he treated Ms. Boley for dizziness and lightheadedness for 34 months. See generally Pet. Ex. 14. The credibility of Dr. Campbell's findings and conclusions is subject to question due to various legal proceedings in Texas involving his medical credentials and treatment methods. The Special Master dismissed Dr. Campbell's findings, giving them no weight in her analysis of Petitioner's case. Boley, 2008 WL 4615034 at *24-26. The Court agrees with the Special Master's determination in this regard, and neither party currently attaches any importance to Dr. Campbell's findings and conclusions.

Ms. Boley began visiting another neurologist, Dr. Richard Hughes, in 2006. Pet. Ex. 23 at 24-26. When Dr. Hughes first examined Ms. Boley, he found her neurologically normal. <u>Id.</u> at 25. In response to Ms. Boley's description of her medical history, Dr. Hughes found it "difficult to completely substantiate" the existence of a chronic inflammatory demyelinating polyneuropathy ("CIDP"). <u>Id.</u> at 26. Dr. Hughes suggested that Ms. Boley increase her sleep, exercise, and fluid intake, and improve her eating habits. <u>Id.</u> In a November 13, 2006 visit, Dr. Hughes attributed Ms. Boley's dizziness to ear problems. <u>Id.</u> at 18. Dr. Hughes noted a strong temporal relationship between the hepatitis B vaccination and certain of Ms. Boley's health concerns, but he also observed that "[i]t is certainly plausible that a second, completely unrelated diagnosis could have been made at that time, unrelated to the hepatitis B vaccine." <u>Id.</u> at 17.

The history of proceedings in this case is described in the Court's earlier opinion. Boley, 82 Fed. Cl. at 410-12. At the December 14, 2007 hearing, Dr. Hughes testified in

⁵ The Court observed in its first opinion in this case that Ms. Boley "began receiving treatment from Dr. Andrew Campbell on May 24, 2003." <u>Boley</u>, 82 Fed. Cl. at 409. From further review of the extensive medical records, it now appears to the Court that Ms. Boley completed a medical questionnaire from Dr. Campbell dated May 24, 2003, but that her initial office visit to Dr. Campbell occurred on August 1, 2003. Pet. Ex. 14 at 18-20.

⁶ "CIDP," or chronic inflammatory demyelinating polyneuropathy, is a disease characterized by muscle weakness in the arms or legs, and loss of reflexes. <u>Dorland's Illustrated Medical Dictionary</u>, 31st ed. (2007) at 1513.

Petitioner's behalf, and Dr. Martin Bielewski testified for the Government. Both experts agreed that Ms. Boley suffered an adverse reaction to the hepatitis B vaccine, but the question is whether Ms. Boley's injuries lasted for more than six months. The Special Master determined in her decision on remand that they did not, and she dismissed the petition. Boley, 2008 WL 4615034 at *30.

Analysis

A. Standard of Review

Under the National Vaccine Injury Compensation Program, a Special Master's decision may not be disturbed on review unless it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. . . ." 42 U.S.C. § 300aa-12(e)(2)(B); Vaccine Rule 27(b). Findings of fact receive deferential review under an "arbitrary and capricious" standard; legal conclusions are reviewed under the "not in accordance with law" standard; and discretionary rulings are reviewed for "abuse of discretion." See, e.g., Munn v. Sec'y of HHS, 970 F.2d 863, 870 n.10 (Fed. Cir. 1992). Under the "arbitrary and capricious" standard, so long as the Special Master has "considered the relevant evidence of record, drawn plausible inferences and articulated a rational basis for the decision," the Court should not disturb the Special Master's findings of fact. Hines v. Sec'y of HHS, 940 F.2d 1518, 1528 (Fed. Cir. 1991).

In reviewing the Special Master's decision on remand, the Court is applying the "arbitrary and capricious" standard to the Special Master's findings of fact.

B. Causation and Burden of Proof

There are two methods prescribed in the National Vaccine Injury Compensation Program for a petitioner to demonstrate causation. First, causation is presumed if a petitioner shows by a preponderance of the evidence, through medical records or expert testimony, that the injury is one listed on the Vaccine Injury Table, 42 U.S.C. § 300aa-14(a), and that the injury occurred within the time provided by the Table. Capizzano v. Sec'y of HHS, 440 F.3d 1317, 1319-20 (Fed. Cir. 2006); (citing Munn, 970 F.2d at 865). Second, in a case where the alleged injury is not listed on the Vaccine Injury Table, a petitioner must establish causation-in-fact. Pafford v. Sec'y of HHS, 451 F.3d 1352, 1355 (Fed. Cir. 2006); Shyface v. Sec'y of HHS, 165 F.3d 1344, 1350-51 (Fed. Cir. 1999). As a threshold matter, unless death or surgical intervention occurred, a petitioner must show that the injury from the vaccine persisted for at least six months. 42 U.S.C. § 300aa-11(c)(1)(D)(i).

A petitioner can establish a prima facie case on causation "by providing: (1) a medical theory causally connecting the vaccination and the injury; (2) a logical sequence of cause and effect showing that the vaccination was the reason for the injury; and (3) a showing of a proximate temporal relationship between the vaccination and the injury." Althen v. Sec'y of HHS, 418 F.3d 1274, 1278 (Fed. Cir. 2005). Petitioner must satisfy a "but for" test for causation, that "but for" the vaccination, the harm would not have occurred. Pafford, 451 F.3d at 1356. However, a petitioner is not required to show that the vaccine was the sole or predominant cause of the injury, nor does a petitioner need to offer particular types of evidence or prove causation as a matter of scientific or medical certainty. Althen, 418 F.3d at 1279-81; Shyface, 165 F.3d at 1352-53.

Once a petitioner establishes a prima facie case, the burden of proof shifts to respondent to prove by a preponderance of the evidence that the "illness, disability, injury, condition, or death described in the petition is due to factors unrelated to the administration of the vaccine described in the petition." Althen v. Sec'y of HHS, 58 Fed. Cl. 270, 281 (2003) (citation omitted), aff'd 418 F.3d 1274; 42 U.S.C. § 300aa-13(a)(1)(B). The inquiry of "factors unrelated" is to be made after the Special Master has determined that a petitioner has established a prima facie case of causation. See Grant v. Sec'y of HHS, 956 F.2d 1144, 1149 (Fed. Cir. 1992).

C. Petitioner's Medical Records

In the remand proceedings, Petitioner's counsel elected not to reopen the hearing, and thus declined to present additional evidence from Dr. Hughes, from other treating physicians, or from Ms. Boley herself. Accordingly, in reviewing the Special Master's decision, the Court must rely principally upon the medical records in this case. These records are extensive, and they have been addressed in detail by counsel for the parties and the Special Master.

The Court accepts the view of the expert witnesses, Dr. Hughes and Dr. Bielewski, that Ms. Boley experienced an adverse reaction to the June 12, 2002 hepatitis B vaccination, but most probably the reaction lasted only for ten days to two weeks. The Court's conclusion is supported by the expert testimony of Dr. Bielewski. Hr'g Tr. 55 (Nov. 14, 2007). The Court notes that Ms. Boley had experienced dizziness and lethargy for two years prior to receiving the hepatitis B vaccine. Although some of these pre-vaccine incidents occurred while Ms. Boley was pregnant, the incidents closest in time to the hepatitis B vaccination occurred when Ms. Boley was not pregnant. Thus, dizziness and lethargy were nothing new to Ms. Boley. The Court does not see an especially compelling "temporal relationship," as Dr. Hughes and Dr. Volz found, between the hepatitis B vaccination and the onset of dizziness and lethargy. Although Ms. Boley may have described her medical history to

various doctors in a way that suggested a temporal relationship, a careful review of the records would contradict this conclusion.

The pattern of Ms. Boley's medical visits in the few months following the hepatitis B vaccination also belies the existence of an ongoing adverse reaction. After a visit to the North Suburban Medical Center on June 21, 2002, Ms. Boley made no medical visits for the next five weeks, until July 29, 2002. A similar six-week gap occurred from August 19 to October 8, 2002. If Ms. Boley were continuing to suffer an adverse reaction from the June 12, 2002 hepatitis B vaccination, it is not plausible that she would have separate five- and six-week periods of not seeing a doctor. If nothing else, the record in this case demonstrates that Ms. Boley, at least by 2002, was not shy about seeking medical advice.

Ms. Boley's anxiety, emotional stress, and panic attacks seem most directly tied to attending dental hygiene school, and not to the hepatitis B vaccine. Faced with leaving her young children to attend school, some anxiety certainly would be expected. Ms. Boley's anxiety began a short time before starting school, and her "shaking episodes" subsided when the semester was completed. See Pet. Ex. 5 at 57. The stress, anxiety, and panic attacks thus are most probably unrelated to the hepatitis B vaccination. The Government's expert, Dr. Bielewski, also came to this conclusion. Hr'g Tr. 60.

In the period following December 12, 2002 (six months after the hepatitis B vaccination), there is nothing to indicate the continuation of any adverse reaction to the vaccine. In almost every instance, in fact, the examining doctors found Ms. Boley to be physically and neurologically normal. While subjecting Ms. Boley to a thorough and wideranging battery of tests, the doctors could find nothing wrong with her. To the extent any mention is made of the hepatitis B vaccine, it appears in the portion of the medical records where Ms. Boley is describing her history. No doctor made such a finding.

The Court therefore finds that Ms. Boley did not satisfy the threshold issue under the National Vaccine Injury Compensation Program that her injuries from the hepatitis B vaccine lasted more than six months. See 42 U.S.C. § 300aa-11(c)(1)(D)(i). Although the Court accepts the view that Ms. Boley experienced a difficult adverse reaction in the days immediately following the hepatitis B vaccination, a reaction lasting ten days to two weeks must be regarded as fairly typical, and is not a category of injury for which the National Vaccine Injury Compensation Program provides relief.

Conclusion

Based upon the foregoing, the Special Master's September 9, 2008 decision on remand is AFFIRMED. The Court finds that the Special Master did not err in denying

compensation to Ms. Boley under the Vaccine Act. The Petition for Review shall be DISMISSED with prejudice.

IT IS SO ORDERED.

s/Thomas C. Wheeler THOMAS C. WHEELER Judge